Lloyd (Liverpool), Dr. Pipping (Helsingfors), Dr. Boeke (Alkmaar) and others will take part in the discussion.

Communications are also promised from Dr. A. A. Gray (Glasgow), on the cochlea; from Dr. Kennedy (Glasgow), on the repair of nerves; from Dr. Edridge Green, on the classification of the colour blind; from Dr. R. Hutchison, on the chemistry of bone marrow. Other contributions are also promised from workers who have not as yet sent in titles. It is not anticipated, however, that the amount of work will be as great as usual, owing to the fact that many British physiologists are attending the International Congress to be held in Turin a week

later than the Glasgow meeting.

A discussion on the teaching of botany will be opened in Section K by Mr. Wager and Prof. Bower from the point of view of school and university teaching respectively. Prof. Miall, Prof. Marshall Ward, Dr. Scott, Prof. Scott-Elliott and others are expected to take part in the discussion. On Friday afternoon, September 13, Prof. Reynolds Green will deliver a semi-popular lecture on flesh-eating plants. The following papers have been promised:—Prof. Bayley Balfour (president), morphological notes; Prof. Marshall Ward, the Bromes and their brown rusts; Mr. Wager, on the cytology of the Cyanophyceæ; Prof. Bower, on an Ophioglossum collected by Mr. Ridley; Dr. Lang, on the prothalli of Helminthostachys, Ophioglossum pendulum and Psilotum; on certain large prothalli of Lycopodium cernuum; on the mode of occurrence of the prothalli of *L. Selago* at Clova. Mr. Yapp, on two Malayan 'myrmecophilous' ferns; Miss Ford, on the anatomy of Ceratopteris; Mr. Brebner, on the anatomy of Danaea and other Marattiaceæ; Mr. Seward and Miss Ford, on the structure of Todea, and on the geological history of the Osmundaceæ; Dr. Scott, on a primitive type of structure in Calamites; Prof. F. W. Oliver, on the structure of certain Palæozoic seeds; Mr. Seward, Jurassic floras; the structure and origin of jet; Mr. Arber, a collection of fossil plants from New South Wales; Dr. F. F. Blackman and Miss Matthaei, autosurgery in leaves; on respiration; Miss Clark, effect of altered conditions of growth upon Lemna roots; Mr. Tansley, the vegetation of Mount Ophir; Mr. Yapp, some botanical photographs from the Malay Peninsula; Miss Clark, abnormal secondary thickening in Kendrickia Walkeri; Mr. Worsdell, the structure and morphology of the flowers of Cephalotaxus; the morphology of the ovule; Mr. Tagg, museum work; Mr. Borthwick, increment of wood; Mr. Gwynne-Vaughan, the vascular anatomy of the Cyatheaceæ; on the nature of the stele of Equisetum; Mr. Boodle, remarks on the stele and foliar bundles of ferns.

The new section of Educational Science will be opened on the morning of September 12 with an address by the president, Sir John Gorst. In the afternoon there will be papers and discussions on the organisation of education in Scotland and particularly in Glasgow. On September 13, papers on the science of education will be read by Prof. Armstrong, F.R.S., Prof. Miall, F.R.S., Prof. Withers and others. On Monday, September 16, a discussion on the teaching of mathematics will be introduced by Prof. Perry, F.R.S. On September 17 the subject of discussion will be the influence of universities and examining bodies on the education given in secondary schools, introduced by the Bishop of Hereford and Mr. H. W.

Eve

The committee of the Marine Biological Association of the West of Scotland invite members of the Association who are interested in marine biology to work at or visit the Marine Station, Millport, N.B., any time during September 1901, and to join any of the open collecting excursions of the steam yacht Mermaid during that month. The intention should be communicated to the Curator, Marine Station, Millport, N.B.

## THE INTERNATIONAL ZOOLOGICAL CONGRESS.

THE fifth International Congress, the proceedings of which have just terminated in Berlin, has, notwithstanding the depression caused by the recent death of the Empress Frederick, been a brilliant and important reunion, whether judged by the number and status of the zoologists present or by the interest of its work.

The meetings were held in the Reichstagsgebäude, corresponding to our Houses of Parliament, a fact which in itself testifies to the esteem in which science is held

in Germany.

On the evening of Sunday, August 11, an informal gathering was held at which the delegates and members were able to meet and greet each other, to renew old acquaintances and form new ones. The business of the Congress began on Monday, August 12, in the large hall of the Reichstag, when Prof. Möbius assumed the presidential chair and, after declaring the proceedings open, made a touching reference to the sorrow which had fallen upon the Royal Family, and proposed that telegrams of condolence should be sent to the Emperor and to the Crown Prince, who had graciously consented to act as patron of the assembly. Replies to these messages were subsequently received and read.

The Congress was then welcomed by His Excellency Herr Rothe, Under Secretary of State, in the absence of the Chancellor, by Burgomaster Kirschner and by Prof. Harnack, the Rector of the University. Prof. Perrier expressed the acknowledgments of the foreign delegates, and after some formal business, Prof. Grassi, of Rome, delivered a lecture on "The Malaria Problem from the Zoological Point of View," in which he gave an account of the diseases caused by insect-stings and dwelt upon the importance of their study for the progress of hygiene.

It is usual with us to terminate the proceedings of a congress with a picnic, but the committee charged with the arrangements of the present meeting seem to have thought that the proceedings would be smoother if social intercourse preceded debate, and with this view organised

an excursion to the Havel See.

On the Tuesday no forenoon sittings were held, in consequence of the Royal funeral; but at midday a general meeting was held, at which, among other business, it was announced that the prize offered by the Emperor Nicholas II. had been awarded to Dr. Oudemans, of Amsterdam, for his memoir "On the Influence of Light on the Development of Colours in the Lepidoptera.

Dr. Sclater having taken the chair, lectures were delivered on "The Theories of Fertilisation," by Prof. Yves Delage (Paris), who referred to the importance of studying the phenomena, not merely morphologically, but also physiologically; and on "The Psychic Faculties of Ants and other Insects," by Prof. Forel (Morges), in which he sought to show an identity between the senses of insects and our own and to demonstrate their possession of memory, association of sensory impressions and power of drawing conclusions from experience.

A general meeting was also held on Thursday afternoon, August 15, when addresses were given by Prof. E. B. Poulton (Oxford) on "Mimicry," by Prof. Patten (Hanover, U.S.A.) on "The Origin of Vertebrates," Prof. v. Zograf (Moscow) on "Hydrobiological Investigations and Institutes in Russia," M. A. Pizon (Paris) on "The Observation of Budding in Tunicates," Mr. C. G. Schillings (Düren) on "East African Mammals," and Mr. O. Neumann on "Results of a Journey from the Red Sea to the White Nile," all illustrated by the lantern.

At other times the Congress separated into seven sections—viz. General Zoology, Experimental Zoology, Vertebrata (Biology, Classification), Vertebrata (Anatomy,

Embryology), Invertebrata, Arthropoda and Nomenclature. These were presided over on successive days by different zoologists of eminence, and such numerous communications were made to each that it is impossible to give an account of these, or even a list of their titles.

The concluding meeting took place on Friday morning, when a large amount of business was transacted. The report of the Nomenclature Commission, which was adopted, included a recommendation that specific and generic names should be amended only when a printer's error or a mistake in orthography could be proved, and that in all cases the first name given to an animal, whether to the whole animal or to a part, to an adult or a larva, should stand, and also a proposal for introducing uniformity into the arrangement of figures on plates and the designation of their parts by explanatory letters. Resolutions were also passed in favour of the preservation of non-injurious animals and the formation of a section for zoogeography; it was, further, decided to hold the next congress in Bern, under the presidency of Prof. Studer. Addresses were given by Prof. Bütschli (Heidelberg) on "Vitalism and Mechanism," and by Prof. Branco (Berlin) on "Fossil Men," and after the usual complimentary resolutions the Congress was adjourned.

Such were in brief the formal proceedings, but, as is always the case, these were by no means the most important results. More far-reaching in their influence on the life and work of zoologists are the informal discussions and friendly conversations which take place in the intervals, on such occasions as the reception by the City of Berlin at the Rathhaus, by the Zoological Society in its magnificent garden and in other more modest

convivial gatherings.

The whole meeting was admirably organised, with German thoroughness and attention to detail. It only remains to be added that an appendix to the Berlin meeting took place in Hamburg, where the members were received at the Rathhaus by the Senate of the City, by the directors of the Hamburg-American Line on board the ss. *Graf Waldersee* and by the Zoological Society in their garden. A trip to Heligoland terminated the whole proceedings, which must have left a vivid and pleasant impression on the mind of every one present.

## CHARLES A. SCHOTT.

M. CHARLES A. SCHOTT, whose death we regret to record, was renowned throughout the world of physical science on account of his numerous memoirs on terrestrial magnetism. The work accomplished by him during a long and active career was both extensive and influential, and its value has long been recognised by

physicists in both hemispheres.

From an appreciative account of Mr. Schott's work, which appeared in Terrestrial Magnetism two years ago, we learn that he was born at Mannheim, Baden, Germany, August 7, 1826. After passing through the public school and partly through the Lyceum of his native town, he entered the Polytechnic School at Karlsruhe, where, after a six-year course, he graduated as civil engineer in 1847. In December of that year he entered the service of the United States Coast Survey, and in due time became a citizen of the United States. At first he was engaged in office and nautical duties, but he was assigned to the position of Chief of the Computing Division of the Survey in 1855. Mr. Schott continued in charge of this until the end of 1899, and he then undertook the discussion of the arc measurements in the United States resulting from the extension triangulation already executed by the different organisations engaged in survey work. A summary of some of the results of this work was given in NATURE of February 21 (vol. lxiii. p. 408).

Mr. Schott's numerous contributions to the annual reports of the Coast Survey since 1854 relating to hydrography, geodesy, practical astronomy, and especially to terrestrial magnestism, are well known. He also published through the medium of the Smithsonian Institution, between the years 1858 and 1881, a number of memoirs bearing on meteorology and on subjects relating to Arctic explorations. He was a member of the Government parties sent to Springfield, Illinois, to observe the solar eclipse of August 1869, and to Catania, Sicily, to observe that of December 1870. As delegate from the United States Coast and Geodetic Survey, he attended the International Conference on Terrestrial Magnetism, held at Bristol in 1898 in connection with the meeting of the British Association. In the same year he received the Henry Wilde prize of 4000 francs from the Paris Academy of Sciences for his numerous contributions to terrestrial magnetism. This was the first award of the prize; and the President of the United States in making the presentation alluded to the catholicity of scientific work and the recognition of distinguished merit implied in the fact that Mr. Schott-an American-should be awarded by French men of science a prize founded by an Englishman. It is encouraging to know that Mr. Schott's zeal and industry for the advancement of natural knowledge met with recognition in the world of science.

## NOTES.

A COMMITTEE has been appointed by the President of the Board of Trade to inquire and report as to the best means by which the State or local authorities can assist scientific research as applied to problems affecting the fisheries of Great Britain and Ireland. The members of the committee are as follows:—The Right Hon. Sir Herbert Maxwell, Bart., M.P., Mr. Walter E. Archer, Mr. Donald Crawford, Rev. William Spotswood Green, Prof. William Abbott Herdman, F.R.S., the Hon. Thomas H. W. Pelham, Mr. Stephen E. Spring-Rice, C.B., and Prof. J. Arthur Thomson.

It has been decided to erect in Leoben, Austria, a statue of Peter Ritter von Tunner, who died on June 8, 1897, to commemorate his great services to the metallurgy of iron. An influential committee has been formed, with Mr. Ignaz Prandstetter as president, Prof. J. G. von Ehrenwerth as vice-president and Prof. Carl Fritz as honorary secretary, to collect subscriptions. At a recent meeting of the council of the Iron and Steel Institute the matter was considered. As a contribution to the memorial could not be voted from the funds of the Institute, the members of council present decided to contribute two guineas each, and Mr. Bennett H. Brough, the secretary, now informs us that he has forwarded to the committee in Leoben contributions of that amount from twenty-six members.

A REUTER message records that the *Lucania*, which left Liverpool on August 10 for New York, was spoken by wireless telegraphy at Nantucket Lightship shortly after 6 p.m. on August 16. The following message, signed by Captain McKay, was among those received on the lightship from the *Lucania*, and then transmitted forty miles to Siasconset, on Nantucket Island:—"All well on board. We are 287 miles from Sandy Hook, with clear weather, and expect to reach New York on Saturday. Please inform Cunard Agents." On reaching port the officers of the *Lucania* reported that the messages from Nantucket were undecipherable aboard ship.

WE learn from the Athenaeum that Dr. Trootz, the Belgian Minister of the Interior, who is also Minister of Education, has proposed in the Chamber the foundation of a Belgica prize for the promotion of oceanic researches by Belgians, and that the